

PATENT COOPERATION TREATY

PCT

NOTIFICATION OF ELECTION

(PCT Rule 61.2)

From the INTERNATIONAL BUREAU

To:

United States Patent and Trademark
Office
(Box PCT)
Crystal Plaza 2
Washington, DC 20231
ETATS-UNIS D'AMERIQUE

in its capacity as elected Office

Date of mailing (day/month/year)

08 July 1998 (08.07.98)

International application No.

PCT/US97/15856

Applicant's or agent's file reference

ASCOP039WO

International filing date (day/month/year)

07 November 1997 (07.11.97)

Priority date (day/month/year)

07 November 1996 (07.11.96)

Applicant

SCHWARTZ, Robert et al

1. The designated Office is hereby notified of its election made:



in the demand filed with the International Preliminary Examining Authority on:

02 June 1998 (02.06.98)



in a notice effecting later election filed with the International Bureau on:

2. The election



was



was not

made before the expiration of 19 months from the priority date or, where Rule 32 applies, within the time limit under Rule 32.2(b).

The International Bureau of WIPO
34, chemin des Colombettes
1211 Geneva 20, Switzerland

Facsimile No.: (41-22) 740.14.35

Authorized officer

N. Fischer

Telephone No.: (41-22) 338.83.38

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

REC'D 19 MAR 1999

WIPO PCT

4

Applicant's or agent's file reference ASCOP039WO	FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/US97/15856	International filing date (day/month/year) 07 NOVEMBER 1997	Priority date (day/month/year) 07 NOVEMBER 1996
International Patent Classification (IPC) or national classification and IPC IPC(6): G07B 17/04; H04L 9/00 and US Cl.: 705/405; 380/23, 51, 55		
Applicant ASCOM HASLER MAILING SYSTEMS INC.		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.
2. This REPORT consists of a total of 5 sheets.

☐ This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority. (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of 0 sheets.

3. This report contains indications relating to the following items:

- I ☒ Basis of the report
- II ☐ Priority
- III ☐ Non-establishment of report with regard to novelty, inventive step or industrial applicability
- IV ☐ Lack of unity of invention
- V ☒ Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI ☒ Certain documents cited
- VII ☐ Certain defects in the international application
- VIII ☐ Certain observations on the international application

Date of submission of the demand 02 JUNE 1998	Date of completion of this report 02 MARCH 1999
Name and mailing address of the IPEA/US Commissioner of Patents and Trademarks Box PCT Washington, D.C. 20231 Facsimile No. (703) 305-3230	Authorized officer GAIL HAYES <i>Diane Smith for</i> Telephone No. (703) 305-1836

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/US97/15856

I. Basis of the report

1. This report has been drawn on the basis of *(Substitute sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to the report since they do not contain amendments):*

☒ the international application as originally filed.

☒ the description, pages 1-11, as originally filed.

pages NONE, filed with the demand.

pages NONE, filed with the letter of _____.

pages _____, filed with the letter of _____.

☒ the claims, Nos. 1-11, as originally filed.

Nos. NONE, as amended under Article 19.

Nos. NONE, filed with the demand.

Nos. NONE, filed with the letter of _____.

Nos. _____, filed with the letter of _____.

☒ the drawings, sheets/fig 1-3, as originally filed.

sheets/fig NONE, filed with the demand.

sheets/fig NONE, filed with the letter of _____.

sheets/fig _____, filed with the letter of _____.

2. The amendments have resulted in the cancellation of:

☒ the description, pages NONE.

☒ the claims, Nos. NONE.

☒ the drawings, sheets/fig NONE.

3. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the ~~Supplemental Box~~ Additional observations below (Rule 70.2(c)).

4. Additional observations, if necessary:

NONE

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/US97/15856

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**1. STATEMENT**

Novelty (N)	Claims	<u>3-6, 8, and 11</u>	YES
	Claims	<u>1, 2, 7, 9, and 10</u>	NO
Inventive Step (IS)	Claims	<u>NONE</u>	YES
	Claims	<u>1-11</u>	NO
Industrial Applicability (IA)	Claims	<u>1-11</u>	YES
	Claims	<u>NONE</u>	NO

2. CITATIONS AND EXPLANATIONS

- (1) Claims 1-2 lack novelty under PCT Article 33(2) as being anticipated by Gilham.

Gilham teaches the claimed franking machine comprising an encryption engine (18) means for obtaining encrypted code in portions (17), RAM (18) and means for placing decrypted output in RAM (Fig 3).

- (2) Claims 1 and 2 lack novelty under PCT Article 33(2) because they are anticipated by Fougere ('747) [hereinafter Fougere]. See, e.g., Fig. 4 and its accompanying text.

- (3) Claims 3-6, 8, and 11 lacks inventive step under PCT Article 33(3) because it is obvious to a person skilled in the art over Fougere in view of Pintsov, further in view of any of Usui, Dawson, Dolphin, and Matsumoto.

Fougere teaches all of the limitations of the claims except for teaching (1) using signature and hash algorithms, (2) monitoring the time taken to complete a transaction, and (3) all in a PCMCIA environment.

Pintsov teaches calculating a digital signature (which includes calculating a hash, see, e.g., Fig. 2) to assure the authenticity of postage accounting data (providing the motivation to combine).

Usui (see, e.g., line 5 of column 5 to line 3 of column 6), Dawson (see, line 55 of column 14 to line 38 of column 15), Dolphin (see, e.g., lines 41-56 of column 5), Matsumoto (see, e.g., claims 7 and 16) all teach monitoring the time taken to complete a transaction to prohibit unauthorized processing (providing the motivation to combine).

- (4) Claims 7 and 9 lack novelty under PCT Article 33(2) because they are anticipated by Piosenka. See, e.g., the front page of Piosenka.

(Continued on Supplemental Sheet.)

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/US97/15856

VI. Certain documents cited

1. Certain published documents (Rule 70.10)

<u>Application No. Patent No.</u>	<u>Publication Date (day/month/year)</u>	<u>Filing Date (day/month/year)</u>	<u>Priority date (valid claim) (day/month/year)</u>
US, A, 5,590,198	31 DECEMBER 1996	19 DECEMBER 1995	
US, A, 5,688,056	18 NOVEMBER 1997	14 JUNE 1994	

2. Non-written disclosures (Rule 70.9)

Kind of non-written disclosureDate of non-written disclosure
(day/month/year)Date of written disclosure
referring to non-written disclosure
(day/month/year)

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/US97/15856

Supplemental Box

(To be used when the space in any of the preceding boxes is not sufficient)

Continuation of: Boxes I - VIII

Sheet 10

V. 2. REASONED STATEMENTS - CITATIONS AND EXPLANATIONS (Continued):

- (5) Claim 10 lacks novelty under PCT Article 33(2) because it is anticipated by any of Usui (see, e.g., line 5 of column 5 to line 3 of column 6), Dawson (see, line 55 of column 14 to line 38 of column 15), Dolphin (see, e.g., lines 41-56 of column 5), Matsumoto (see, e.g., claims 7 and 16).
- (6) Claims 1-11 all meet the industrial applicability requirement.

NEW CITATIONS

US 4,743,747 A (FOUGERE et al.) 10 MAY 1988 (10.05.88), see the whole document.

US 5,389,738 A (PIOSENKA et al.) 14 FEBRUARY 1995 (14.02.95), see the whole document.

US 5,517,184 A (DAWSON et al.) 14 MAY 1996 (14.05.96), see the whole document.

US 5,457,746 A (DOLPHIN) 10 OCTOBER 1995 (10.10.95), see the whole document.

US 5,343,025 A (USUI) 30 AUGUST 1994 (30.08.94), see the whole document.

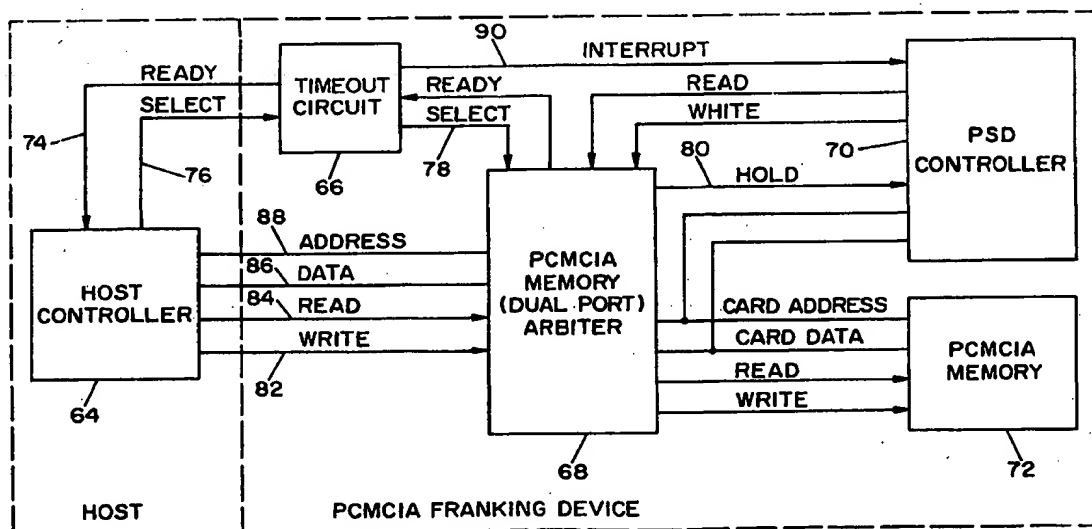
US 5,218,613 A (MATSUMOTO et al.) 08 JUNE 1993 (08.06.93), see the whole document.



INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification ⁶ : G07B		A2	(11) International Publication Number: WO 98/20461
			(43) International Publication Date: 14 May 1998 (14.05.98)
(21) International Application Number: PCT/US97/15856		(81) Designated States: CA, JP, US, European patent (AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE).	
(22) International Filing Date: 7 November 1997 (07.11.97)			
(30) Priority Data: 60/030,537 7 November 1996 (07.11.96) US 60/050,043 18 June 1997 (18.06.97) US 60/054,105 29 July 1997 (29.07.97) US		Published Without international search report and to be republished upon receipt of that report.	
(71) Applicant (for all designated States except US): ASCOM HASLER MAILING SYSTEMS, INC. [US/US]; 19 Forest Parkway, Shelton, CT 06484 (US).			
(72) Inventors; and (75) Inventors/Applicants (for US only): SCHWARTZ, Robert [US/US]; 191 Linden Avenue, Branford, CT 06405 (US). BROOKNER, George [US/US]; 11 Surrey Drive, Norwalk, CT 06851 (US). NACLERIO, Edward [US/US]; 49 Scenic Road, Madison, CT 06443-1738 (US).			
(74) Agent: FERENC, Stanley, D., III; Oppedahl & Larson, Suite 309, 1992 Commerce Street, Yorktown Heights, NY 10598-4412 (US).			

(54) Title: SYSTEM FOR PROTECTING CRYPTOGRAPHIC PROCESSING AND MEMORY RESOURCES FOR POSTAL FRANKING MACHINES



(57) Abstract

An improved system for protecting cryptographic processing and memory for postal franking machines. Appropriate cryptographic processing and memory resources are contained in a Postal Security Device (PSD), which defines a cryptographic and physical boundary. Cryptographic processing occurs in the PSD, which provides security to these resources, thereby minimizing a successful fraudulent attack on the system. Speed of the cryptographic processing is also increased. The PSD may be in the form of an Applications Specific Integrated Circuit (ASIC) or Personal Computer Memory Card International Association (PCMCIA) Card.

FOR THE PURPOSES OF INFORMATION ONLY

Codes used to identify States party to the PCT on the front pages of pamphlets publishing international applications under the PCT.

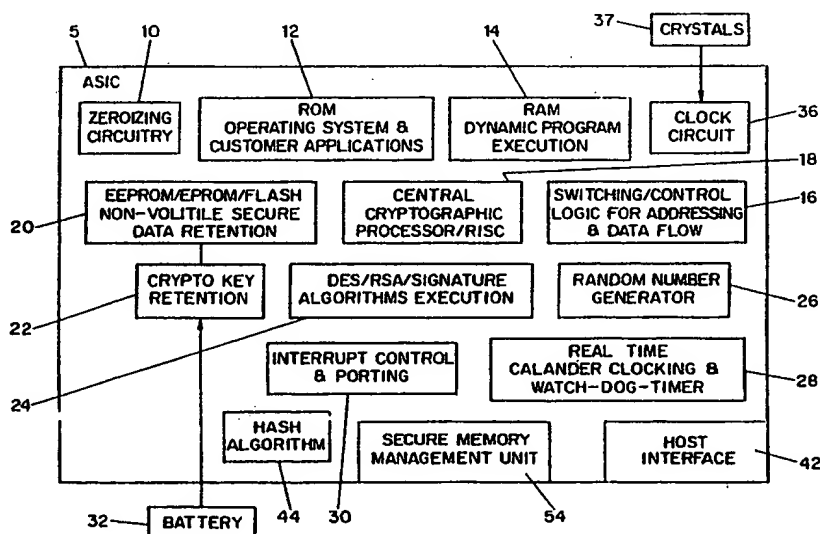
AL	Albania	ES	Spain	LS	Lesotho	SI	Slovenia
AM	Armenia	FI	Finland	LT	Lithuania	SK	Slovakia
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DK	Denmark	LK	Sri Lanka	SE	Sweden		
EE	Estonia	LR	Liberia	SG	Singapore		



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(51) International Patent Classification ⁶ : H04L 9/00		A3	(11) International Publication Number: WO 98/20461
			(43) International Publication Date: 14 May 1998 (14.05.98)
(21) International Application Number: PCT/US97/15856 (22) International Filing Date: 7 November 1997 (07.11.97) (30) Priority Data: 60/030,537 7 November 1996 (07.11.96) US 60/050,043 18 June 1997 (18.06.97) US 60/054,105 29 July 1997 (29.07.97) US (71) Applicant (for all designated States except US): ASCOM HASLER MAILING SYSTEMS, INC. [US/US]; 19 Forest Parkway, Shelton, CT 06484 (US). (72) Inventors; and (75) Inventors/Applicants (for US only): SCHWARTZ, Robert [US/US]; 191 Linden Avenue, Branford, CT 06405 (US). BROOKNER, George [US/US]; 11 Surrey Drive, Norwalk, CT 06851 (US). NACLERIO, Edward [US/US]; 49 Scenic Road, Madison, CT 06443-1738 (US). (74) Agent: FERENGE, Stanley, D., III; Oppedahl & Larson, Suite 309, 1992 Commerce Street, Yorktown Heights, NY 10598-4412 (US).			(81) Designated States: CA, JP, US, European patent (AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE). Published With international search report. (88) Date of publication of the international search report: 8 October 1998 (08.10.98)

(54) Title: SYSTEM FOR PROTECTING CRYPTOGRAPHIC PROCESSING AND MEMORY RESOURCES FOR POSTAL FRANKING MACHINES



(57) Abstract

An improved system for protecting cryptographic processing and memory for postal franking machines. Appropriate cryptographic processing and memory resources are contained in a Postal Security Device (PSD) (5), which defines a cryptographic and physical boundary. Cryptographic processing (18) occurs in the PSD, which provides security to these resources, thereby minimizing a successful fraudulent attack on the system. Speed of the cryptographic processing is also increased. The PSD may be in the form of an Applications Specific Integrated Circuit (ASIC) or Personal Computer Memory Card International Association (PCMCIA) Card.

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AU	Australia	GA	Gabon	LV	Latvia	SZ	Swaziland
AZ	Azerbaijan	GB	United Kingdom	MC	Monaco	TD	Chad
BA	Bosnia and Herzegovina	GE	Georgia	MD	Republic of Moldova	TG	Togo
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BG	Bulgaria	HU	Hungary	MN	Mongolia	TT	Trinidad and Tobago
BJ	Benin	IE	Ireland	MR	Mauritania	UA	Ukraine
BR	Brazil	IL	Israel	MW	Malawi	UG	Uganda
BY	Belarus	IS	Iceland	MX	Mexico	US	United States of America
CA	Canada	IT	Italy	NE	Niger	UZ	Uzbekistan
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DK	Denmark	LR	Liberia	SG	Singapore		
EE	Estonia						

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US97/15856

A. CLASSIFICATION OF SUBJECT MATTER

IPC(6) :H04L 9/00

US CL :380/51, 23, 50

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 380/51, 23, 50, 55, 21

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 4,934,846 A (GILHAM) 19 June 1990	1-11
A, P	US 5,602,921 A (RAMADEI) 11 February, 1997	1-11
A, P	US 5,682,427 A (SEESTROM) 28 October 1997	1-11
A	US 5,448,641 A (PINTSOV, et al.) 05 September 1995	1-11
A	US 5,535,279 A (SEESTROM) 09 July 1996	1-11

☐ Further documents are listed in the continuation of Box C. ☐ See patent family annex.

* Special categories of cited documents:	*T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
A document defining the general state of the art which is not considered to be of particular relevance	*X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
E earlier document published on or after the international filing date	*Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
L document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	*Z* document member of the same patent family
O document referring to an oral disclosure, use, exhibition or other means	
P document published prior to the international filing date but later than the priority date claimed	

Date of the actual completion of the international search

22 APRIL 1998

Date of mailing of the international search report

14 MAY 1998

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